

# MISR Ancillary Climatology Product Quality Statement April 15, 2002

See also

- [Statement dated February 16, 2001](#) for the MISR Ancillary Climatology Product used between February 16, 2001 and April 15, 2002

This statement applies to the MISR Ancillary Climatology Product (ACP), version F03\_0004 of the Aerosol Physical and Optical Properties (APOP) file, and version F03\_0006 of the Aerosol Mixture file, installed at the Langley ASDC April 15, 2002. (All MISR Level 2 Aerosol Surface products generated on or after that date make use of these improved Climatology files.)

The quality of the ACP component aerosol particle data is dependent upon the quality of the ACP input data, which encompass aerosol particles described in the literature while taking into account MISR-specific sensitivity studies. The list has been updated to include smaller component particles. In addition to component particle data, mixtures of commonly-occurring aerosol component particles are reported in the ACP. The list of aerosol mixtures has been updated. The mixture list is expected to improve in quality as experience with the data is gained. Note that the ACP product consists of three parts: the Aerosol Physical and Optical Properties (APOP) file, the Aerosol Mixture file, and the Aerosol Clim-Likely file.

The list below highlights major known problems or limitations in the product.

## **AEROSOL PHYSICAL AND OPTICAL PROPERTIES (a.k.a. APOP, MIANACP)**

### **LIMITED SET OF AEROSOL COMPONENT PARTICLE DUST MODELS**

The aerosol component particles include a red dust model. In the future, a yellow dust model is expected to be added to the list.

### **DEPRECATED FIELDS RELATED TO PARTICLE HYDRATION STATE**

The aerosol component particles are no longer reported in states of hydration. Therefore, the following fields no longer contain useful information, and should be ignored: vdata field 'Relative humidity' in 'Summary Table' vdata; vdata fields 'Relative humidity', 'Hygroscopic', and 'Water activity model' in 'Input Component Particle Types' vdata; vdata fields 'Reference relative humidity model number', 'Water activity model', 'Hygroscopic', and 'Relative humidity' in 'Data Table' vdata; vdata field 'Relative humidity' in 'Hydrated Relative Humidities' vdata; and file global attributes 'Number of hydrated relative humidities', 'Number of water activity models', 'Reference relative humidity'.

## **AEROSOL MIXTURE FILE (a.k.a. MIANACP)**

### **DEPRECATED FIELDS RELATED TO PARTICLE HYDRATION STATE**

The aerosol component particles are no longer reported in states of hydration. Therefore, the following fields no longer contain useful information, and should be ignored: vdata field 'Relative humidity' in 'Mixture Data' vdata; and file global attribute 'Reference relative humidity'.

## **AEROSOL CLIM-LIKELY FILE (a.k.a. MIANACP)**

### **AEROSOL CLIM-LIKELY INFORMATION NOT YET AVAILABLE**

Information regarding the climatological-likelihood of the occurrence of various aerosol types around the globe is not presently included in the Ancillary Climatological Product (ACP).

